STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

May 3, 2007

Certified Mail No. 7005 1160 0000 1550 9057

Wade Chapman, General Manager
Idaho Supreme Potatoes, Inc.
P.O. Box 246
Firth, Idaho 83236

RE: Facility ID No. 011-00013, Idaho Supreme Potatoes, Inc., Firth, Idaho
Permit to Construct Application Incompleteness

Dear Mr. Chapman:

On April 3, 2007, the Department of Environmental Quality (DEQ) received your Permit to Construct application to modify the Tier II operating permit for the Idaho Supreme Potatoes, Inc., potato dehydration plant located at the corner of Highway 91 and 800 N. Goshen Highway near Firth. DEQ has reviewed the application materials and determined that the application is incomplete. DEQ needs the following information to determine the application complete:

1. **Fluidized Bed Dryer PM/PM_{10} Emission Factor (EF).**

   PM/PM_{10} emissions from the fluidized bed dryer were estimated in the April 3, 2007 application using AP-42 EFs for cereal drying (1.5 lb PM/ton processed and 0.66 lb PM_{10}/ton processed). Emission estimates for fluidized bed dryers at similar facilities typically treat the PM_{10} emissions as equal to PM emissions, and source tests for similar dryers indicate that PM emissions may be as high as 3.5 lb/ton processed. Information provided on Application Form MI1 shows that the PM_{10} emissions may reach 94% of the 24-hr PM_{10} NAAQS. Source testing will be required for this emission source in your permit. You may want to consider the potential ramifications of using an emission factor that may be significantly lower than the actual emissions.

   Consider reevaluating this EF.

2. **Coal Sulfur Content.**

   The application refers to the average sulfur content of coal as 0.5%. Be advised that absent a demonstration in the application of some method of recordkeeping that will track the sulfur concentration and the amount of coal burned, the permit will restrict the maximum sulfur content of coal to 0.5% on an as-received basis.

   No action necessary, unless the applicant chooses to propose an appropriate method for tracking the average sulfur content of coal on an as-received basis.

3. Criteria Pollutant Modeling.

a. Item No. 14 of the December 20, 2004 Consent Order (CO) requires submittal by February 25, 2005 of a complete Tier II permit application that contains a facility-wide emission inventory and facility-wide modeling that demonstrates compliance with all applicable standards. Idaho Supreme submitted a Tier II application on February 25, 2005 that included facility-wide modeling using ISC-PRIME. On March 25, 2005, DEQ determined that the application was incomplete because the ambient impacts for PM_{10} were analyzed using only two days of meteorological data for both the 24-hour and annual averaging periods. Additional information was received by DEQ on June 1, 2005, and the application determined complete on July 1, 2005. No further action was taken on the permit.

b. On January 25, 2007, the February 25, 2005 application (DEQ Project No. T2-050304) was withdrawn by Idaho Supreme. DEQ terminated the project on February 9, 2007. Since no final action was taken on this permit application, and the application has been withdrawn, the modeling submitted with that application (the most recent files submitted were dated 053105) is also considered withdrawn. The April 3, 2007 Tier II application includes a facility-wide emission inventory, but provided modeling only for two TAPs from Boiler #4 (in electronic form, and documented in a September 19, 2006 Supplement to the [2005] Air Quality Modeling Report).

Resubmit criteria pollutant modeling files, or provide a run date/submittal date for previously submitted files to be used for the current application.

Provide the BPIP files for criteria pollutant modeling and TAPs modeling.

c. The February 25, 2005 modeling report submitted with the April 3, 2007 application has already been deemed deficient by DEQ on March 25, 2005, based on concerns regarding the PM_{10} modeling

Evaluate February 25, 2005 modeling report to ensure that the results match the criteria pollutant modeling (dated 053105 or other date identified in response to Item 2.b).

4. Modeled Parameters.

Stack heights, stack diameters, temperatures, and flow rates for emission sources provided in the April 3, 2007 application forms; the February 25, 2005 modeling report; and the criteria pollutant modeling files dated 053105 are inconsistent. Discrepancies noted during the completeness review are shown in the attached table. This may not be a complete list; the detailed review to ensure that modeled parameters and results reported in the application

match the modeling is the applicant's responsibility. Emission rates used in the modeling are in grams/second, emission rates listed in the application are in lb/hr.

Confirm modeling parameters, and revise application, modeling report, and/or modeling to reflect the correct values.

Provide a table of emission rates for each source showing the modeled emission rates in g/sec and in lb/hr.

Submission of the requested information is due within 30 days of receipt of this incompleteness letter. If you need more time to respond to the letter, contact me prior to the 30 day deadline. If DEQ does not receive the needed information or a request for extension prior to the 30 day deadline the project will be terminated and a new permit application fee will be required when the application is resubmitted.

Since DEQ has declared the application incomplete, review of this project has ceased. Processing of this application will resume upon submission of sufficient information and the project timeline for permit issuance will restart.

If you have any questions about this incompleteness letter or about the permitting process, please contact me at (208) 373-0502 or cheryl.robinson@deq.idaho.gov.

Sincerely,

Cheryl A. Robinson

Cheryl A. Robinson, P.E.
Staff Engineer/Permit Writer
Air Quality Division

CR Permit No. P-2007.0049

IDAHO SUPREME POTATOES, INC., FACILITY ID 011-00013, P-2007.0049 APPLICATION REVIEW: MODELING PARAMETER DISCREPANCIES

	Stack Height (m)			Modeled Diameter (m)			Temp (K)			Flow Rate (acfm)		
	4/3/2007 Appl.	2/25/2005 Report	Modeling 5/31/2005 *9/18/2006*	4/3/2007 Appl.	2/25/2005 Report	Modeling 5/31/2005 *9/18/2006*	4/3/2007 Appl.	2/25/2005 Report	Modeling 5/31/2005 *9/18/2006*	4/3/2007 Appl.	2/25/2005 Report	Modeling 5/31/2005 *9/18/2006*
Boiler #4	12.29	18.29 (60')	18.29 (60') *18.29 (60')*	0.91	0.85	0.91 *0.91*	463.6		463.6 *463.6*	32,000		32,000 *32,000*
Boiler #3	10.36	11.06	11.06	0.88			568.8		560.8	1,300	13,000	
Fluidized Bed Dryer	8.60	8.60	8.60	1.04		0.8534	321		322	26,000		
National Dryer Stage A	8.00	7.99	8.00	0.7			366.3			8,500		
National Dryer Stage B	8.00	7.99	8.00	0.7			366.3			7,500		
National Dryer Stage C	8.00	7.99	8.00	0.7			366.3			7,500		8,500
Secondary Dryer (1st vent)	7.68			0.76			293.15			7,000		
Secondary Dryer (2nd vent	7.68			0.76			293.15			7,000		
Storage Silo A -J	22.43			0.24 (9.45 in)	5" x 10.5" (8.18 in)	0.24	366.48		293.15	750		
Flaker #1	9.83	7.37	10.67	1.14			293			9,935	7,031	7,031
Flaker #2	9.83	7.37	10.67	1.14			293			9,935	7,300	7,343
Flaker #3	9.83	7.37	10.67	1.14			293			9,935	7,300	7,286
Flaker #4	9.83	7.37	10.67	1.14			293			9,935	7,500	7,505
Flaker #5	7.68		10.67	0.63			293			10,333	7,500	12,723
Flaker #6	8.29		10.67	0.76			293			10,793	7,500	12,692
Flaker #7	8.29		10.67	0.76			293			10,793	7,500	12,714
Flaker #8	8.29		10.67	0.76			293			10,793	8,524	8,525
Flaker #9	9.83			0.61			293			10,793	7,500	7,482
Flaker #10	9.83			0.61			293			10,793	7,500	7,500
Flaker #11	9.83			0.61			293			10,793	7,500	7,547
Flaker #12	9.83			0.61			293			10,793	7,500	7,500
	Release Height (m)			Initial Vertical (m)			Initial Horiz (m)					
Space Heater S	25.00		7.62 (25 ft)	5.58		3.12	30.48		14.2			
Space Heater N	25.00		7.62 (25 ft)	5.58		3.12	30.48		28.4			
Space Heater E	25.00		7.62 (25 ft)	5.58		3.12	30.48		29.7			
Space Heater W	25.00		7.62 (25 ft)	5.58		3.12	30.48		29.7			

ec: Bill Rogers, Permit Coordinator
Rensay Owen, Idaho Falls Regional Office
Shay Marcotte/Betty Flowers
Source File
Reading File

Dan Heiser, JBR Environmental Consultants, Inc., dheiser@jbrenv.com

Idaho Supreme Potatoes, Inc.
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Firth, Idaho 83236-0246

www.IdahoSupreme.com

World's Finest Potatoes
PROCESS DIVISION

PHONE: (208) 346-6841 • FAX: (208) 346-4104 • E-MAIL: spuds@idahosupreme.com

October 25, 2007

Cheryl Robinson
Staff Engineer/Permit Writer
Air Quality Division
Idaho Department of Environmental Quality
1410 North Hilton
Boise, Idaho 83706

RE: Facility ID No. 011-00013, Idaho Supreme Potatoes, Inc., Firth, Idaho Permit to Construct Application Incompleteness Response

Dear Ms. Robinson:

Idaho Supreme Potatoes, Inc. (Idaho Supreme) is submitting the following information in response to the PTC application incompleteness letter dated May 3, 2007. Below is a list of the information requested and Idaho Supreme's response.

1. **Fluidized Bed Dryer PM/PM_{10} Emission Factor (EF).**

The PM/PM_{10} emission factor for the fluidized bed dryer has been updated to 3.5 lb/ton instead of the previously submitted 1.5 lb/ton. Included in Attachment A are the updated PTC application emission inventory forms which reflect this change in the fluidized bed dryer PM/PM_{10} emission rate.

2. **Coal Sulfur Content.**

At this time Idaho Supreme does not wish to propose a method for tracking the average sulfur content of coal on an as-received basis.

3. **Criteria Pollutant Modeling.**

The February 2005 modeling report was evaluated and updated to provide a complete criteria pollutant compliance demonstration that reflects verified source, stack, and model parameters. The updated modeling report is included in Attachment B. Supporting documentation, including all model source data, all electronic model input and output files for the updated criteria pollutant, and the TAPs modeling files are included on the enclosed CD.

4. **Updated Modeling Parameters and Application Forms.**

Idaho Supreme has conducted a detailed review of all model source and stack parameters to ensure the correct values are reported and used in the impact analyses. Included in Attachment C are the updated modeling application forms which reflect the modeling parameters used to develop the modeling report included in Attachment B. Also included in Attachment C is a table of emission rates for each source showing the modeled emission rates in g/sec and lb/hr.

Should you have any questions regarding this information please contact me or Daniel Heiser of JBR Environmental Consultants, Inc. at 208.853.0883.

I certify that based on information and belief formed after reasonable inquiry, the statements and information enclosed are true, accurate and complete to the best of my knowledge.

Respectfully Submitted,

Wade Chapman
General Manager
Idaho Supreme Potatoes, Inc.
208.346.6841

Enclosures

Attachment A

Updated PTC Application Emission Inventory Forms

Facility-wide emission Inventory - Criteria Pollutants - Point Sources **Form EI-CP1**

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton Boise, ID 83706 **For assistance: (208) 373-0502**	**PERMIT TO CONSTRUCT APPLICATION**

Company Name:	Idaho Supreme Potatoes, Inc.
Facility Name:	Firth Facility
Facility ID No.:	011-00013
Brief Project Description:	Tier II PTC application to modify boiler operations

SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - POINT SOURCES

		3.											
1.	2.	PM_{10}		SO_2		NO_x		CO		VOC		Lead	
Emissions units	Stack ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Source(s)													
Boiler #4	B4	13.16	32.74	172.46	413.76	30.55	133.81	11.45	50.15	0.75	3.28		
Boiler #3	B3	0.32	1.42	0.03	0.11	6.08	26.63	3.59	15.73	0.24	1.00		
Fluidized Bed Dryer	FBD	3.50	15.33	0.00	0.02	1.10	4.82	0.57	2.50	0.04	0.18		
National Dryer Stage A	Nat Dry A	0.06	0.26	0.01	0.02	0.78	3.42	0.65	2.85	0.04	0.19		
National Dryer Stage B	Nat Dry B	0.02	0.11	0.00	0.01	0.31	1.36	0.26	1.14	0.02	0.07		
National Dryer Stage C	Nat Dry C	0.02	0.11	0.00	0.01	0.31	1.36	0.26	1.14	0.02	0.07		
Secondary Dryer (1st vent)	Sec. Dry 1	0.00	0.17	0.00	0.00	0.03	0.12	0.02	0.10	0.00	0.01		
Secondary Dryer (2nd vent)	Sec. Dry 2	0.00	0.17	0.00	0.00	0.03	0.12	0.02	0.10	0.00	0.01		
Silo Storage A	Silo A	0.06	0.28										
Storage Silo B	Silo B	0.06	0.28										
Storage Silo C	Silo C	0.06	0.28										
Silo Storage D	Silo D	0.06	0.28										
Storage Silo E	Silo E	0.06	0.28										
Storage Silo F	Silo F	0.06	0.28										
Storage Silo G	Silo G	0.06	0.28										
Silo Storage H	Silo H	0.06	0.28										
Storage Silo I	Silo I	0.06	0.28										
Silo Storage J	Silo J	0.06	0.28										
Process National Dryer Stage A	P Nat Dry A	0.38	1.29										
Process National Dryer Stage B	P Nat Dry B	0.38	1.29										
Process National Dryer Stage C	P Nat Dry C	0.38	1.29										
Total		18.86	57.00	172.50	413.93	39.19	171.63	16.82	73.71	1.11	4.81		

Facility-wide emission Inventory - Criteria Pollutants - Point Sources **Form EI-CP1**

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton Boise, ID 83706 **For assistance: (208) 373-0502**	**PERMIT TO CONSTRUCT APPLICATION**
Company Name:	Idaho Supreme Potatoes, Inc.	
Facility Name:	Firth Facility	
Facility ID No.:	011-00013	
Brief Project Description:	Tier II PTC application to modify boiler operations	

SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - POINT SOURCES

		3.											
1.	2.	PM_{10}		SO_2		NO_x		CO		VOC		Lead	
Emissions units	Stack ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Source(s)													
Dehydration Lines (Total)													
Flaker #1	Flake 1	0.38	1.29										
Flaker #2	Flake 2	0.38	1.29										
Flaker #3	Flake 3	0.38	1.29										
Flaker #4	Flake 4	0.38	1.29										
Flaker #5	Flake 5	0.38	1.29										
Flaker #6	Flake 6	0.38	1.29										
Flaker #7	Flake 7	0.38	1.29										
Flaker #8	Flake 8	0.38	1.29										
Flaker #9	Flake 9	0.38	1.29										
Flaker #10	Flake 10	0.38	1.29										
Flaker #11	Flake 11	0.38	1.29										
Flaker #12	Flake 12	0.38	1.29										
Secondary Dryer (1st vent)	Sec Dry 1	0.38	1.29										
Secondary Dryer (2nd vent)	Sec Dry 2	0.38	1.29										
Space Heater South	Space S	0.06	0.18	0.00	0.02	0.80	2.43	0.67	2.00	0.04	0.12		
Space Heater North	Space N	0.06	0.18	0.00	0.02	0.80	2.43	0.67	2.00	0.04	0.12		
Space Heater East	Space E	0.11	0.34	0.01	0.03	1.50	4.53	1.30	3.80	0.01	0.24		
Miscellaneous Space Heater	Space Misc.	0.02	0.06	0.00	0.00	0.20	0.60	0.17	0.51	0.01	0.03		
Storage Tanks	Tanks										0.06		
Total		5.50	18.82	0.02	0.06	3.30	10.00	2.81	8.31	0.10	0.57		

Facility-wide emission Inventory - Criteria Pollutants – Fugitive Sources **Form EI-CP2**

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton Boise, ID 83706 **For assistance: (208) 373-0502**	**PERMIT TO CONSTRUCT APPLICATION**

Company Name:	Idaho Supreme Potatoes, Inc.
Facility Name:	Firth Facility
Facility ID No.:	011-00013
Brief Project Description:	Tier II PTC application to modify boiler operations

SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - FUGITIVE SOURCES

		3.											
1.	2.	PM_{10}		SO_2		NO_x		CO		VOC		Lead	
Fugitive Source Name	Fugitive ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Fugitive Source(s)													
Paved Roads	Roads		2.50										
... (insert more rows as needed)													
Total			2.50										

Attachment B

Updated Modeling Report

AIR DISPERSION MODELING REPORT
for
IDAHO SUPREME POTATOES, INC.
FIRTH FACILITY

October 25, 2007

Prepared for:

Idaho Supreme Potatoes, Inc.
P.O. Box 70
Firth, ID 83236-0246

&

State of Idaho
Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706

Prepared by:

jbr environmental consultants, inc.
7669 West Riverside Drive, Suite 101
Boise, ID 83714

1.0 Ambient Air Quality Impact Analysis

1.1 Environmental Evaluation

This report describes the results of dispersion modeling conducted for Idaho Supreme Potatoes, Inc. (Idaho Supreme) Firth facility located in central Bingham County, Idaho. This modeling addresses incompleteness items documented by IDEQ in the PTC application incompleteness letter dated May 3, 2007. Idaho Supreme is providing a modeling analysis which documents compliance with PM_{10} impact standards and identifies accurate stack parameters.

Idaho Supreme will increase stack heights on the facility flaker and fluidized bed dryer stacks to those heights documented in this analysis to ensure PM_{10} ambient air compliance. Consistent with previous agreements with IDEQ during the permitting process, this report documents an ambient air compliance demonstration, performed consistent with an IDEQ-approved modeling protocol, which shows compliance with all applicable criteria pollutant ambient air quality standards.

Idaho Supreme provided in its April 3, 2007 Tier II application a past modeling analysis that was conducted for TAPs. The modeling that was submitted was conducted in September 2006 consistent with IDEQ and EPA guidance and requirements and is still a representative analysis for TAPs. The emissions modeled in September 2006 were limited to selected TAP increases from the #4 Bigelow Boiler while overall emissions decreased significantly as a results of a fuel change. There have been no additional increases in TAP emissions. There have been no additional increases in TAP emissions. The stack parameters and emission rates that were used in the September 2006 analysis have been reviewed and are consistent with the stack parameters used in this current modeling report for criteria pollutants. The table below documents the stack parameters and emission rates utilized in the September 2006 report and utilized in this recent modeling analysis.

Source	Stack Height (m)	Temp (K)	Exhaust Flow (acfm)	Stack Diameter (m)
#4 Bigelow Boiler	18.29	463.56	32,000	0.91

The source modeling data files for previous TAPs modeling are included with this report. Idaho Supreme believes that compliance with TAPs has been documented in previous permit application and/or modeling submissions which utilized representative data and is still applicable.

1.2 Summary of Required Information

Idaho Supreme's Firth facility is located at the corner of Highway 91 and 800 North, Goshen Highway, less than 1 mile northeast of Firth. Air Quality Control Region 61 surrounding Firth (Bingham Co.) and the facility's significant impact area are classified as attainment for all criteria pollutants. The approximate UTM coordinates of this facility are UTMN: 4795^{900}, UTME 404^{800}, in Zone 12.

1.3 Emission Units

Actual emissions, consistent with historic and planned future production rates, were used for all facility sources of criteria pollutants. Stack parameters were reevaluated to resolve inconsistencies between previously submitted modeling runs and other permit documentation. In addition, some stack alterations were required to ensure compliance with ambient impact limits. Those changes, which include raising all facility flaker release points to the GEP stack height of 56 feet and raising the fluidized bed dryer stack to 40 feet, are reflected in the model source parameters documented in Table 1.

The modeled emission rates are based on an updated emission inventory which includes utilizing a higher PM_{10} emission factor for the fluidized bed dryer. All other emission rates are consistent with the emission inventory submitted in the April 3, 2007 Tier II PTC application. Table 1 summarizes the emission rates used in this evaluation.

Two scenarios were modeled, consistent with an October, 2007 Modeling Protocol Supplement which was approved by IDEQ. Numerous modeling runs prepared to support that modeling protocol supplement verified that the facility would show compliance with ambient impact standards as long as the flaker stacks were at GEP stack height of 56 feet. Final stack configuration is not yet fully defined. In the IDEQ-approved modeling protocol, two model scenarios were proposed that in combination would justify any stack configuration as long as the release point for all flaker exhausts was at least the GEP stack height of 56 feet. The two scenarios are as follows:

1) Existing flaker stacks each raised to GEP stack height
2) Flaker exhausts combined and routed into conservatively high diameter stacks with conservatively low exhaust flows

Scenario number two 2) described above utilized the most conservative conceivable scenario for combined flaker stacks. Table 1 shows the stack parameters for the point and volume sources. The yellow highlight indicates flaker exhausts for scenario number one 1) with individual stack height increase, while the blue highlight indicates scenario number two 2) for conservative combined stack exhaust flows. The modeling analysis conservatively assumed all model sources operate continuously year-round.

Table 1 Model Source Data

POINT SOURCES	Easting (X)	Northing (Y)	Base Elev	Stack Height	Temp	Exit Vel	Stack Diam	SO2	NO2	CO	PMTEN
Source ID	(m)	(m)	(m)	(ft)	(°F)	(fps)	(ft)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
SSA	404710.6	4795912.5	1392.4	73.6	68.0	24.9	0.80				0.064
SSB	404716.6	4795921.0	1392.5	73.6	68.0	24.9	0.80				0.064
SSC	404721.6	4795930.5	1392.5	73.6	68.0	24.9	0.80				0.064
SSD	404727.0	4795939.5	1392.5	73.6	68.0	24.9	0.80				0.064
SSE	404732.2	4795948.5	1392.5	73.6	68.0	24.9	0.80				0.064
SSF	404737.4	4795958.0	1392.5	73.6	68.0	24.9	0.80				0.064
SSG	404743.0	4795967.0	1392.5	73.6	68.0	24.9	0.80				0.064
SSH	404748.2	4795976.3	1392.5	73.6	68.0	24.9	0.80				0.064
SSI	404753.6	4795985.5	1392.5	73.6	68.0	24.9	0.80				0.064
SSJ	404759.0	4795995.0	1392.5	73.6	68.0	24.9	0.80				0.064
DS_A	404805.2	4795931.0	1392.8	26.2	199.7	34.2	2.30	0.005	0.78	0.65	0.434
DS_B	404813.0	4795942.5	1392.6	26.2	199.7	30.2	2.30	0.002	0.31	0.26	0.399
DS_C	404816.7	4795948.5	1392.5	26.2	199.7	30.2	2.30	0.002	0.31	0.26	0.399
BB4	404804.4	4795918.5	1392.8	60.0	374.7	76.2	2.99	172.5	30.55	11.45	13.200
CB3	404797.3	4795908.0	1392.8	36.3	549.7	33.1	2.89	0.03	6.08	3.59	0.320
FLKR1	404769.4	4795915.0	1392.6	56.0	67.7	10.7	3.74				0.375
FLKR2	404773.1	4795920.5	1392.6	56.0	67.7	11.1	3.74				0.375
FLKR3	404765.8	4795917.0	1392.6	56.0	67.7	11.1	3.74				0.375
FLKR4	404769.8	4795922.5	1392.6	56.0	67.7	11.4	3.74				0.375
FLKR5	404762.3	4795919.5	1392.5	56.0	67.7	37.3	2.07				0.375
FLKR6	404765.8	4795925.0	1392.6	56.0	67.7	25.6	2.49				0.375
FLKR7	404758.8	4795921.5	1392.5	56.0	67.7	25.6	2.49				0.375
FLKR8	404762.7	4795927.0	1392.5	56.0	67.7	29.1	2.49				0.375
FLKR9	404797.6	4795934.5	1392.7	56.0	67.7	39.7	2.00				0.375
FLKR10	404799.8	4795938.5	1392.6	56.0	67.7	39.7	2.00				0.375
FLKR11	404794.9	4795935.5	1392.6	56.0	67.7	39.7	2.00				0.375
FLKR12	404797.0	4795940.0	1392.6	56.0	67.7	39.7	2.00				0.375
SD1	404833.5	4795961.0	1392.5	25.2	68.0	23.9	2.49	0.0002	0.03	0.02	0.377
SD2	404836.3	4795959.0	1392.5	25.2	68.0	23.9	2.49	0.0002	0.03	0.02	0.377
FBD	404750.7	4795926.5	1392.5	40.0	120.0	70.4	3.41	0.004	1.1	0.57	3.500
FLKR18	404766.0	4795921.0	1392.6	56.0	67.7	3.1	12				3.000
FLKR912	404797.3	4795937.1	1392.7	56.0	67.7	1.5	10				1.500

VOLUME SOURCES	Easting (X)	Northing (Y)	Base Elevation	Rel Ht	Horiz Dime	Vertical Dim	PM10	SO2	NO2	CO	PMTEN
Source ID	(m)	(m)	(m)	(ft)	(ft)	(ft)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
SRC1	404745.8	4795869.5	1392.5	25	46.59	10.24	0.06103		0.8	0.67	
SRC2	404881.6	4795957.0	1392.5	25	93.08	10.24	0.114294		1.5	1.3	
SRC3	404844.4	4796025.0	1392.5	25	97.41	10.24	0.06103		0.8	0.67	
SRC4	404805.0	4795970.0	1392.5	25	97.41	10.24	0.02		0.2	0.17	

Yellow highlight indicates flaker stack data for individual stack raise scenario
Blue highlight indicates combined flaker stack scenario, which would be in place of the individual flaker stack model sources

1.4 Meteorological Data

Five years of AERMOD ready meteorological data from Roberts, Idaho, approximately 12 miles to the north, was provided by IDEQ and recommended for use in this analysis. Those five years of data, from 2000 to 2004 were used for this analysis. Model runs were for individual years, consistent with the IDEQ supplied meteorological data.

1.5 Ambient Air Standards

The air dispersion modeling effort compares Idaho Supreme's impact on the surrounding area with EPA National Ambient Air Quality Standards (NAAQSs) and matching Idaho standards. Emission impacts compared to NAAQS were the highest 2nd high from any of the five years for the short-term averages, and the maximum impact in any year for the annual average.

No Class I areas within 100 kilometers of the facility were identified in this environmental evaluation. Ambient air background levels applicable to this area were added to the air dispersion model output for comparison to the IDEQ standards and NAAQS. Background concentrations used in this modeling, as prescribed by IDEQ, are shown in Table 2.

Table 2 Air Pollutant Evaluation Periods, Standards and Background Concentrations

POLLUTANT	Averaging Period	NAAQS (or SIL) ($\mu g/m^3$)	Background Concentration ($\mu g/M^3$)
SO_2	Annual 24-Hour 3-Hour	80 365 1300	8 26 34
NO_2	Annual	100	17
CO	8-Hour 1-Hour	40000 1000	2300 2600
PM-10	Annual 24-hour	1 5	26 73

1.6 Air Dispersion Models

The EPA-approved model AERMOD was used for this analysis, with the Prime downwash algorithm. The modeling utilized BeeLine's compilation of AERMOD through their BEEST pre-processor. Model graphics were produced with the BEEST modeling package. All modeling input and output files are included on the enclosed compact disc.

1.6.1 Modeling Parameters

Modeling parameters used to approximate the emissions, terrain, and METdata are listed below in Table 3.

Table 3 Air Dispersion Modeling Settings

Parameter	Setting
Dispersion	Rural, by Concentration
Anemometer Height	10 Meters
Fence Line (Receptor) Boundary	Property Line as indicated Site Map
Terrain, Coordinates	Simple and Complex, Elevated, Normalized UTM Coordinates
Receptor Grid(s)	See section 1.6.3
Regulatory Options	Stack tip Downwash, Building Downwash (BPIP), Regulatory Default Options Horiz and capped stacks as per IDEQ Modeling Guide
Dispersion Output	Concentrations (ug/m^3)
PRIME Downwash Option	Used, as per IDEQ recommendation

1.6.2 Modeling Approach

The approach taken with this modeling effort was to build the model using the emission rates shown in Table 1. Emission temperatures and exit velocities identified by Idaho Supreme and manufacturer's data were used. Additional stack parameters, building dimensions, and fence line locations were taken from facility-provided information. Terrain elevations were determined by interpolating the USGS DEMs for Firth, Idaho and surrounding areas and site plan surveys. As discussed in section 7.4, multiple meteorological files were used for the PM-10 analysis because of concerns with representativeness of some aspects of the Pocatello airport meteorological data file.

1.6.3 Mapping, Model Domain, Receptors and File Names

The model runs feature a dense fine grid receptor network consistent with the modeling protocol approved by IDEQ. The receptor network includes 25-meter grid spacing along the property boundary, then 50-meter grid spacing out to 250 meters, 250-meter grid spacing out to 1250 meters, and 500-meter grid spacing out to 5 kilometers. Figure 1 shows the model sources and the nearest ambient air boundary receptors at and beyond the property boundary. Model sources are shown in red inside the property boundary, and facility buildings are in black. The grid the figure is laid out on is based upon UTM coordinates, which are in meters. The solid line just west of the property boundary conservatively estimates the extent of the bordering railroad and

Highway 91. The fact that the dots for receptors start inside that line at the property boundary shows that that area is in ambient air. The nearest regularly occupied properties to the west are at least that far from the property boundary.

Figure 1 Model Sources and NAAQS / SIL Ambient Air Boundary Receptors

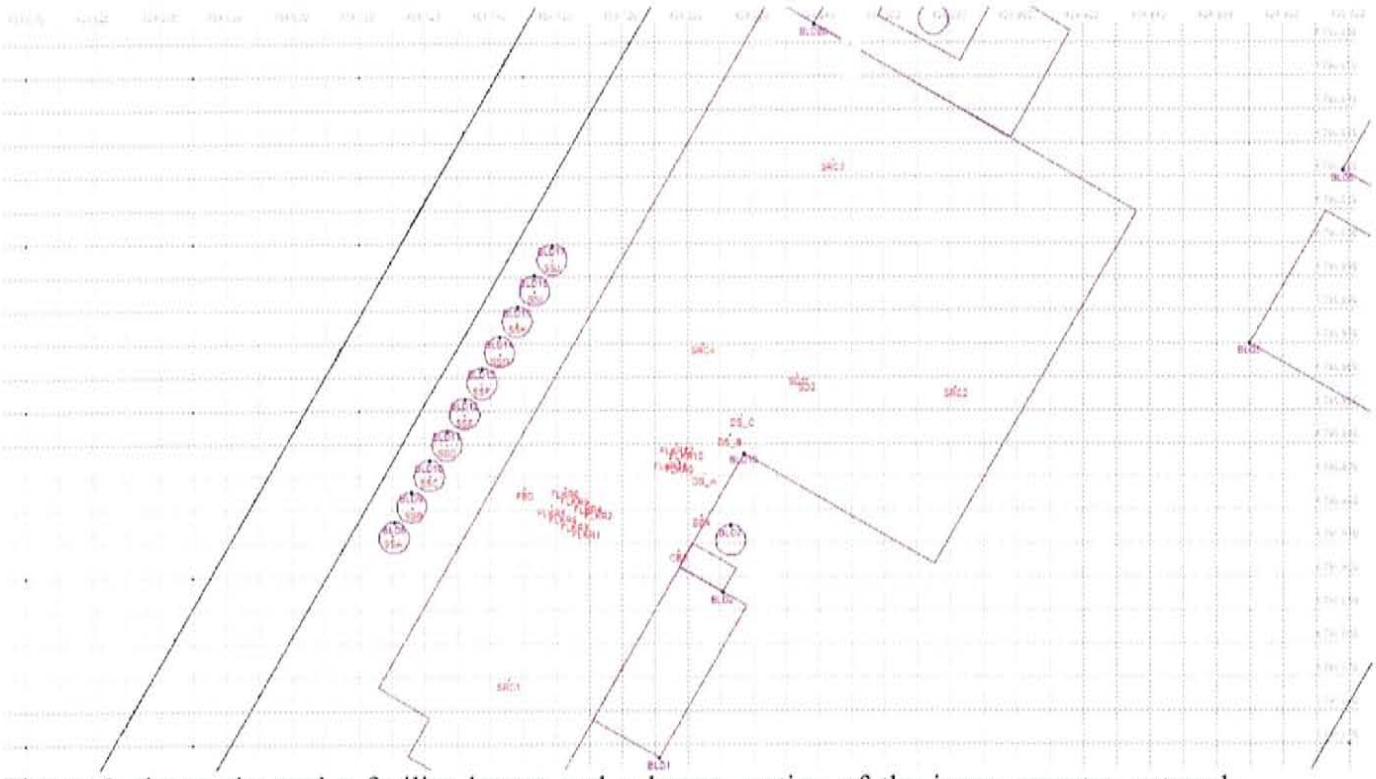


Figure 2 shows the entire facility layout and a larger portion of the inner receptor network. Consistent with Figure 1, the coordinates are UTMs in meters, model sources are in red and facility buildings are in black inside the property boundary, and the receptor network moves out from the property boundary.

Figure 2 Inner Receptor Network

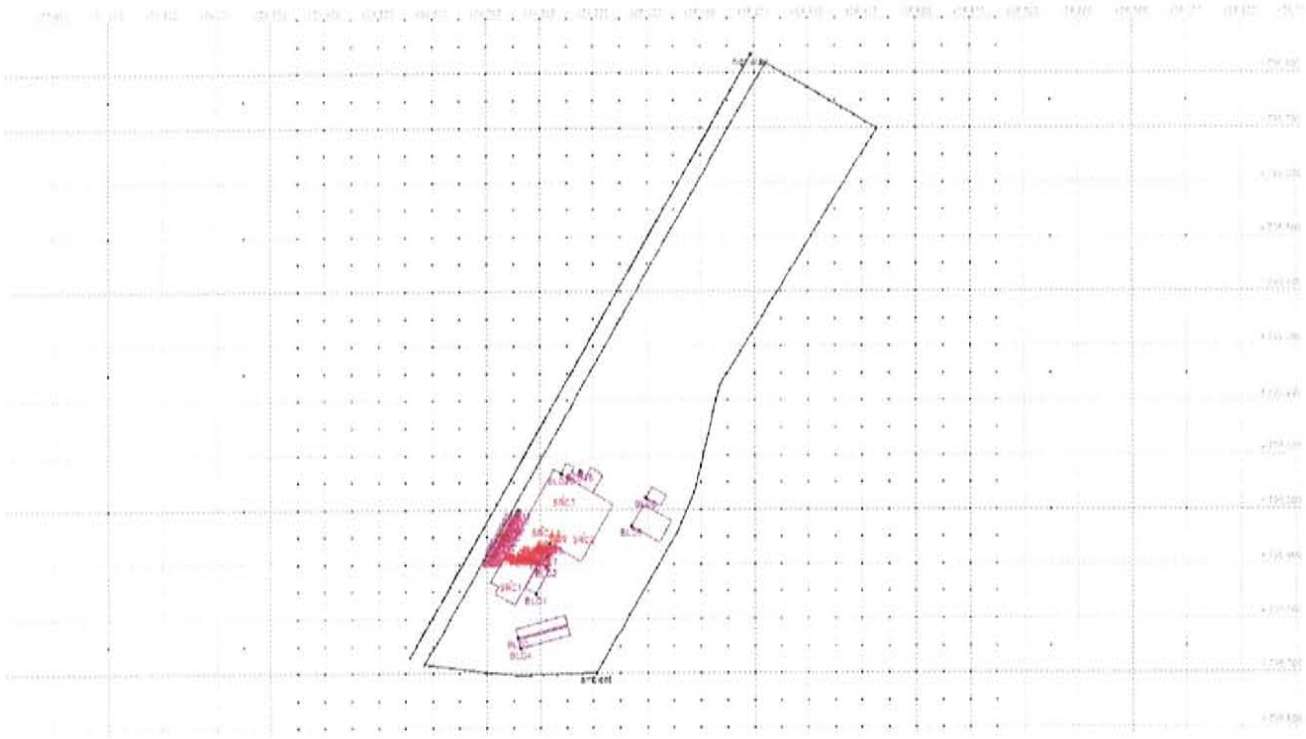
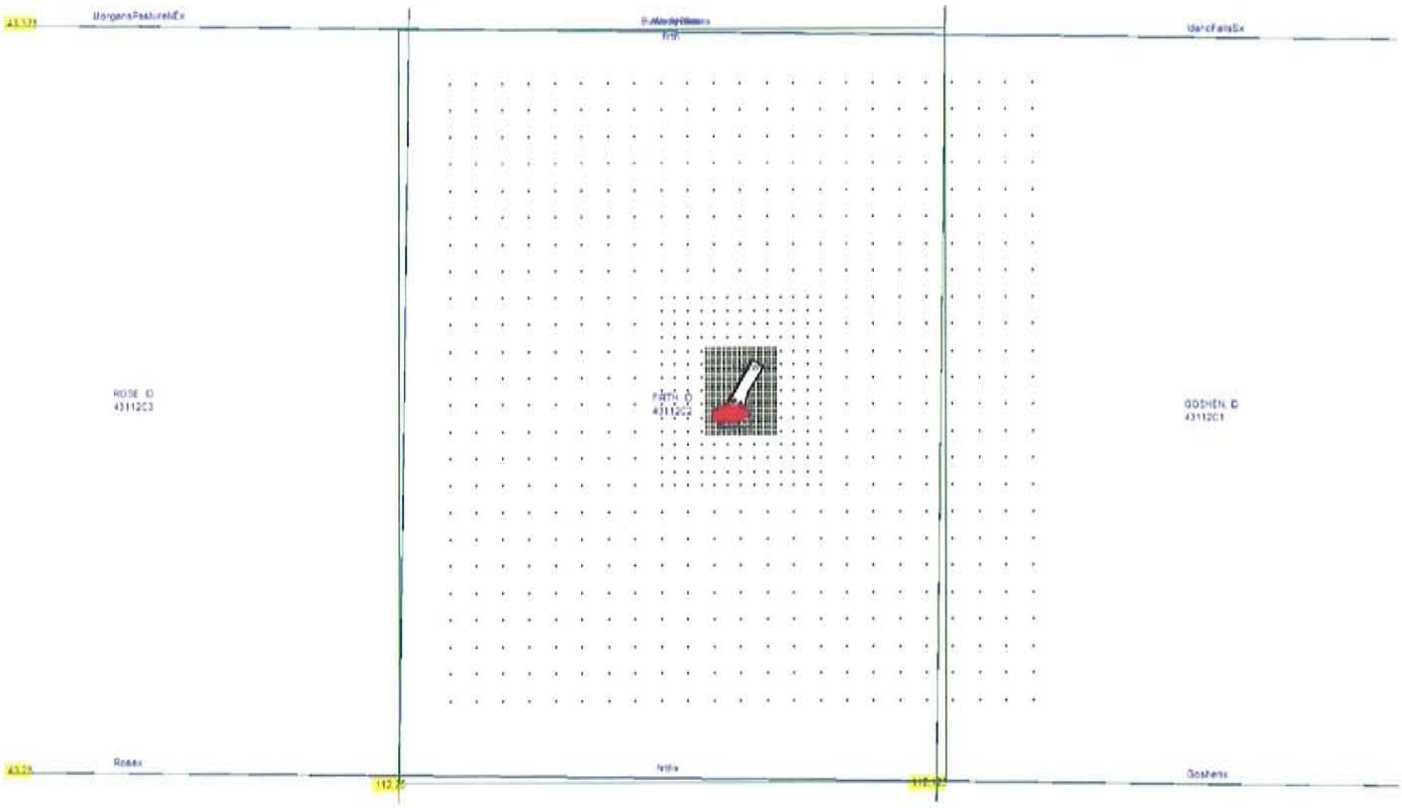


Figure 3 shows the extended receptor network, and the AERMOD model domain in green. The background identifies USGS topographic quad maps. The model domain was verified using the BeeLine BEEST calculations which verified all USGS quad maps with terrain meeting EPA AERMOD elevation requirements. In this case, only one USGS quad map, Firth was required.

Figure 3 Outer Receptor Network



All model maximum impacts occurred at the property boundary, well within the area featuring 25 meter receptor spacing.

Table 4 identifies the computer modeling file names that are included in the electronic submittal. The yy in the names represent the year, which ranges from 00 to 04 for years 2000 to 2004Computer input files for this evaluation end in the suffix; '* .DAT', output files labeled '*.LST', and downwash files end in '*.PIP' and '*.SO'.

Table 4 Computer Modeling File Names

File Name	Evaluation
IDSupr1007_yy_SO2,	**SO_2** - 3-Hour, 24-Hour, and Annual Average impacts
IDSupr1007_yy_NO2	**NOx** - Annual Average impacts
IDSupr1007_yy_CO	**CO** - 1- and 8-Hour impacts
IDSupr1007_yy_PM10 IDSupr1007combflaker_87_PM10	**PM-10** - 24-Hour and Annual Average impacts,

1.7 Results

The NAAQS modeling results demonstrate compliance with all criteria pollutant NAAQS with no operational restrictions beyond those documented in the permit application.

Results from this environmental evaluation are presented in the enclosed computer disk in their full EPA ISCST3 electronic format. Table 10 identifies the air pollutant, averaging period, maximum ambient air impact, receptor location, IDEQ background concentration, and total predicted ambient concentration. The air dispersion modeling is based on 365 days of meteorological data and 365 days of emissions at the loads described in the previous paragraph. Appendix A provides more detail on the PM-10 compliance demonstration.

1.7.1 SO_2 Modeling

The facility SO_2 sources were modeled for the 3-hour, 24-hour, and annual averaging times. The results are summarized in Table 5 below. The appropriate background concentrations have been added to determine compliance with NAAQS.

Table 5
Refined SO_2 Modeling Results

Parameter	Modeled Impacts ($\mu g/m^3$)		
	Annual	3-hour	24-hour
Year with Max Impact	2003	2001	2002
Concentrations	23.2	398.5	121.7
Background	8	34	26
Total $\mu g/m^3$	29.2	432.5	147.7
NAAQS ($\mu g/m^3$)	80	1300	365

All impacts are well below NAAQS.

1.7.2 PM-10 Modeling

Impacts from facility-wide PM-10 emissions were modeled for the annual and 24-hour averaging times for two scenarios, each with ball stacks at GEP stack height of 56 feet: flaker stacks raised individually, or two conservative flaker stacks in the center of each current flaker stack grouping. The results are summarized in Table 6 and 7 below.

Table 6
Refined PM-10 Modeling Results Existing Stacks Raised to GEP

Parameter	Modeled Impacts ($\mu g/m^3$)	
	Annual	24-hour
Year with Max Impact	2003	2002
Concentrations	15.9	57.0
Background	26	73
Total $\mu g/m^3$	41.9	130
NAAQS ($\mu g/m^3$)	50	150

Table 7
Refined PM-10 Modeling Results Combined Stacks at GEP

Parameter	Modeled Impacts ($\mu g/m^3$)	
	Annual	24-hour
Year with Max Impact	2003	2001
Concentrations	20.8	73.1
Background	26	73
Total $\mu g/m^3$	46.8	146.1
NAAQS ($\mu g/m^3$)	50	150

As shown, the ambient PM-10 concentrations are predicted to be within applicable NAAQS impact limits under each scenario modeled. Appendix A documents the 1007 modeling protocol addendum and IDEQ concurrence by IDEQ Stationary Source Modeling Coordinator Kevin Schilling that this modeling with GEP stacks as conservative as conceivable shows that the facility will meet the NAAQS ambient impact limits with any stack configuration as long as all flaker stacks release at least GEP stack height of 56 feet.

1.7.3 NOx Modeling

The facility NOx sources were modeled for the annual averaging period. The results are summarized in Table 8 below. The appropriate background concentrations have been added to determine compliance with NAAQS.

Table 8
Refined NO_x Modeling Results

Parameter	Modeled Impacts ($\mu g/m^3$)
	Annual
Year of Max impact	2002
Concentrations	18.7
Background	17
Total $\mu g/m^3$	35.7
NAAQS ($\mu g/m^3$)	100

All impacts are well below NAAQS.

1.7.4 CO Modeling

The facility CO sources were modeled for the 1-hour and 8-hour averaging times. The results are summarized in Table 9 below. The appropriate background concentrations have been added to determine compliance with NAAQS.

Table 9
Refined CO Modeling Results

Parameter	Modeled Impacts ($\mu g/m^3$)	
	1-hour	8-hour
Concentrations	214.5	114.2
Background	3600	2300
Total $\mu g/m^3$	3814.5	2414.2
NAAQS ($\mu g/m^3$)	40000	10000

All impacts are well below the Significant Impact levels (SILs) and the NAAQS.

A summary of the modeling results is shown in Table 10.

Table 10 Air Dispersion Modeling Results Summary

Pollutant	Averaging Period	Result (ug/M^3)	Location (UTME, UTMN)	Background (ug/M^3)	Result + Background (ug/M^3)	NAAQS Or SIL (ug/M^3)
SO_2	3-Hour	398.5	S boundary S of plant	34	432.5	1,300
	24-Hour	121.7	S boundary S of plant	26	147.7	365
	Annual	23.2	S boundary S of plant	8	31.2	80
PM-10	24-Hour	57.0 73.1	W boundary W of plant W boundary W of plant	73	130.0 [s] 146.1	150
	Annual	15.9 20.8	W boundary W of plant W boundary W of plant	26	41.9 46.8	50
NOx	Annual	18.7	S boundary S of plant	17	35.7	100
CO	1-Hour	215	Insignificant impact	3600	3815	40000
	8-Hour	114	Insignificant impact	2300	2314	10000

Red entries for PM-10 reflect worst-case GEP stack height impacts. Black entries represent the case where each individual flaker stack is at GEP height

Predicted ambient concentrations with worst case facility impacts are less than half of allowable ambient impact limits for all criteria pollutants. When background concentrations are included, predicted maximum ambient concentrations are under 50% of the NAAQS for all pollutants except for PM-10. Maximum PM-10 impacts with worst case GEP stack assumptions approach but do not reach or exceed NAAQS PM-10 impact limits, in part because background concentrations are estimated at half those standards. Maximum PM-10 impacts assuming each individual stack height is increased are shown to be more than 10% below the NAAQS standards despite background concentrations nearly half those standards.

The maximum predicted impact locations are driven by building downwash. For all pollutants except PM-10, maximum predicted impacts are predicted to occur within the plant building wake on the south property boundary. Maximum PM-10 impact locations for both stack scenarios and both averaging periods are on the west property boundary, in the wake of the plant building. Building downwash is accentuated in that area due to a long, squat building close to the property boundary, with the flaker and fluidized bed dryer stacks off-center toward that boundary.

Maximum model predicted 24-hour average impacts assuming all flaker stacks are individually raised to GEP stack height are shown in Figure 4. All receptors with predicted facility impacts over 10 $\mu g/m^3$ are highlighted. Note that the figure shows that predicted impacts are quite low everywhere except in the immediate building wake.

Figure 4 Location of Maximum 24-Hour Average Impacts, Separate Flaker Stacks

Maximum model predicted 24-hour average impacts with worst-case GEP height flaker stacks are shown in Figure 5. All receptors with predicted facility impacts over 10 $\mu g/m^3$ are highlighted. Note that this figure also shows that predicted impacts are quite low everywhere except in the immediate building wake.

Figure 5 Location of Maximum 24-Hour Average Impacts, Combined Flaker Stacks

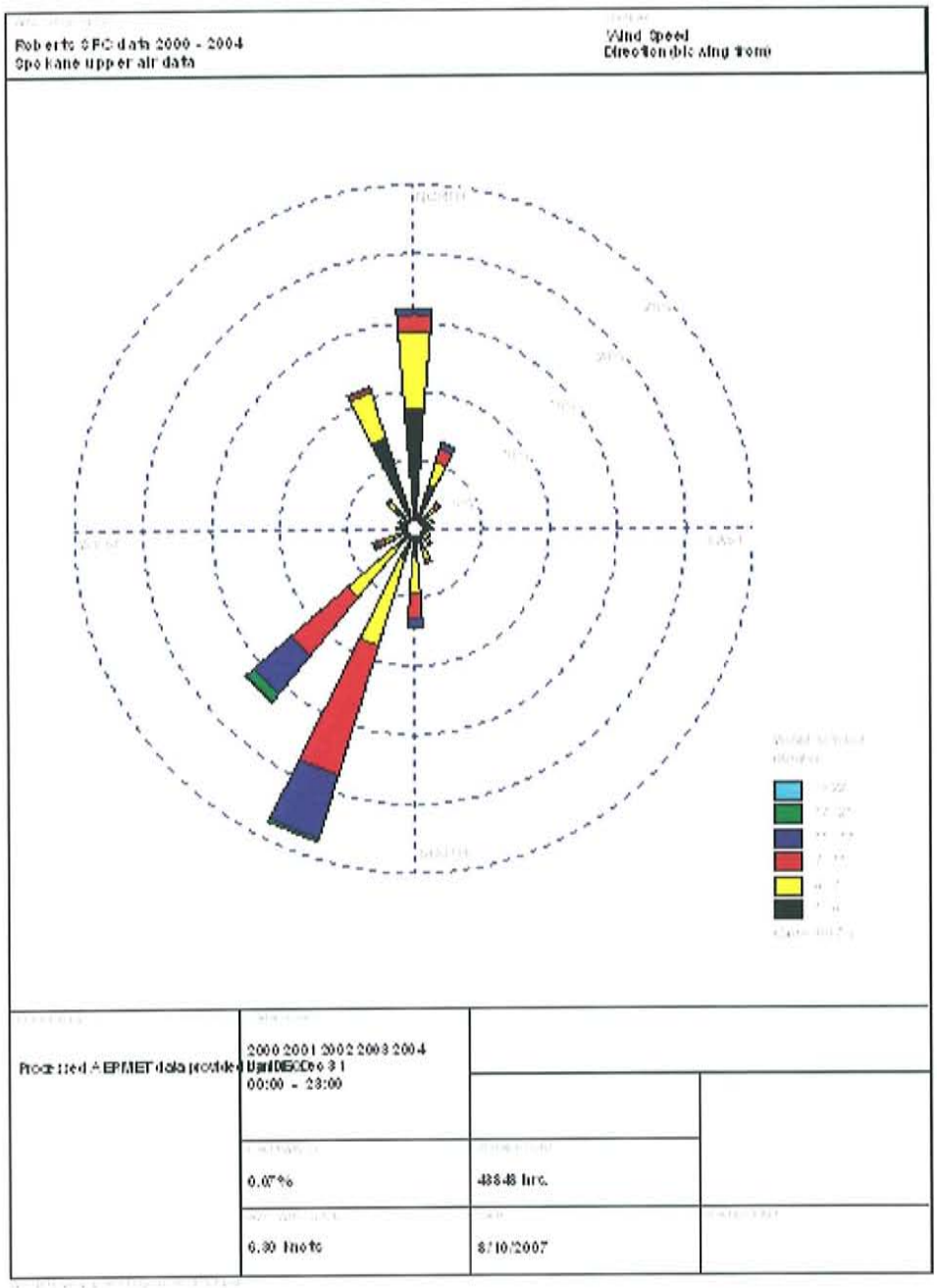
The maximum annual PM-10 impact locations matched those for the 24-hour average analysis with the Pocatello meteorological data are shown in Figure 6. All predicted facility impacts over 3 $\mu g/m^3$ are highlighted. As with the shorter term averaging period, maximum predicted impacts drop off sharply from the near in building wake area.

Figure 6 Location of Maximum Annual Average Impacts, Combined Flaker Stacks

1.8 Summary

The modeling results demonstrate that facility operations will result in ambient air quality levels that comply with all applicable ambient impact limits.

Figure 6
Roberts airport wind rose



Attachment A

AIR DISPERSION MODELING REPORT
for
IDAHO SUPREME POTATOES, INC.
FIRTH FACILITY

September 19, 2006 Supplement
to the 2004 Air Quality Modeling Report
in support of the facility's IDEQ air quality permit

This report describes updates to the air quality modeling analysis previously provided in support of the Idaho Supreme Firth, Idaho facility's air permit, and approved by Idaho DEQ in support of that permit application.

The facility proposes changes that would not affect the emissions from any other source included in the IDEQ-approved modeling analysis but their primary boiler, the #4 Bigelow boiler. The proposed changes would not affect the stack parameters used in previous modeling analysis either.

The table at the end of this document shows the proposed revised emissions from the #4 Bigelow boiler. Those changes represent descreases in emissions for all criteria pollutants below those previously modeled for all criteria pollutants, most by a factor of 2 or more. Therefore, the modeling analysis previously submitted and approved by IDEQ during permit review conservatively demonstrates compliance with all applicable ambient air quality impact limits for all criteria pollutants.

The revised emission inventory includes emissions of TAPs from the #4 Bigelow boiler as a result of the proposed revision. Those total emissions were assumed to represent an increase of emissions from the boiler over previously permitted emissions. That assumption is very conservative, since the previously permitted conditions included TAP emissions. The increase in TAP emissions was compared against IDAPA 585 and 586 Emission Limits (ELs). That analysis showed one 585 non-carcinogen (hydrogen chloride), and five 586 carcinogens (arsenic, beryllium, cadmium, chromium VI, and nickel) were emitted above IDAPA ELs. A modeling analysis was performed to estimate the maximum ambient impacts of each of those TAPs in ambient air. Those predicted maximum impacts were compared against IDAPA 585 AACs or IDAPA 586 AACCs to verify compliance with IDEQ ambient impact limits for TAPs.

The choice of models and all model parameters except pollutant emission rates were exactly as in the previous permit modeling approved by IDEQ after being completed consistent with an IDEQ-approved modeling protocol. One meteorological file covering 5 years of meteorological data was used in this analysis, the same file used for earlier permit analyses. The reported 24-hour average is very conservatively the second highest predicted value over five years of meteorological data. The model included only one pollutant, TAPs, with a normalized emission

rate of 1 lb/hr (0.126 g/sec). For comparisons against IDAPA 585 AACs, the maximum predicted 24-hour average impact (0.91499 ug/m^3) was multiplied by the emission rate for the TAP emitted above the IDAPA EL to estimate maximum ambient impacts for that TAP. Similarly, the maximum impact for the IDAPA 586 TAPs was estimated by multiplying the maximum predicted annual average impact (0.07889 ug/m^3) was multiplied by the emission rate for the TAP emitted above the IDAPA EL to estimate maximum ambient impacts for that TAP.

Figure 1 shows the maximum impact location for the normalized TAP emissions modeled for the annual average period, which occurred on the property / ambient air boundary NE of the boiler. All model receptors with predicted max impacts over 0.04 ug/m^3 are shown.

Figure 1 Maximum Annual Impact for 1 lb/hr Normalized Model TAP Source

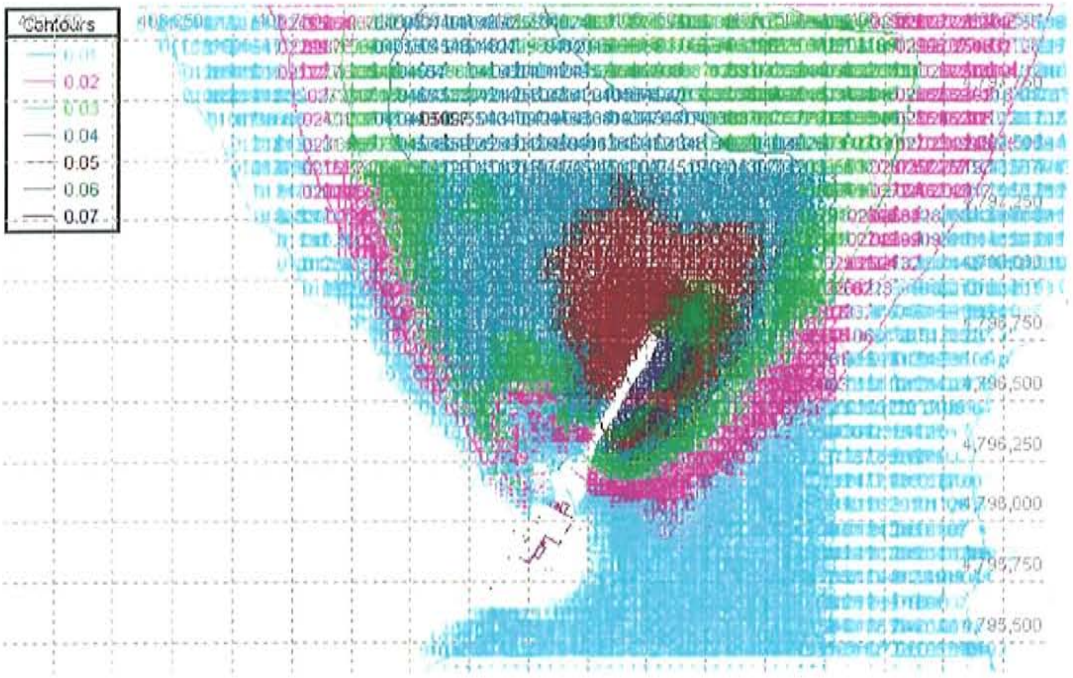
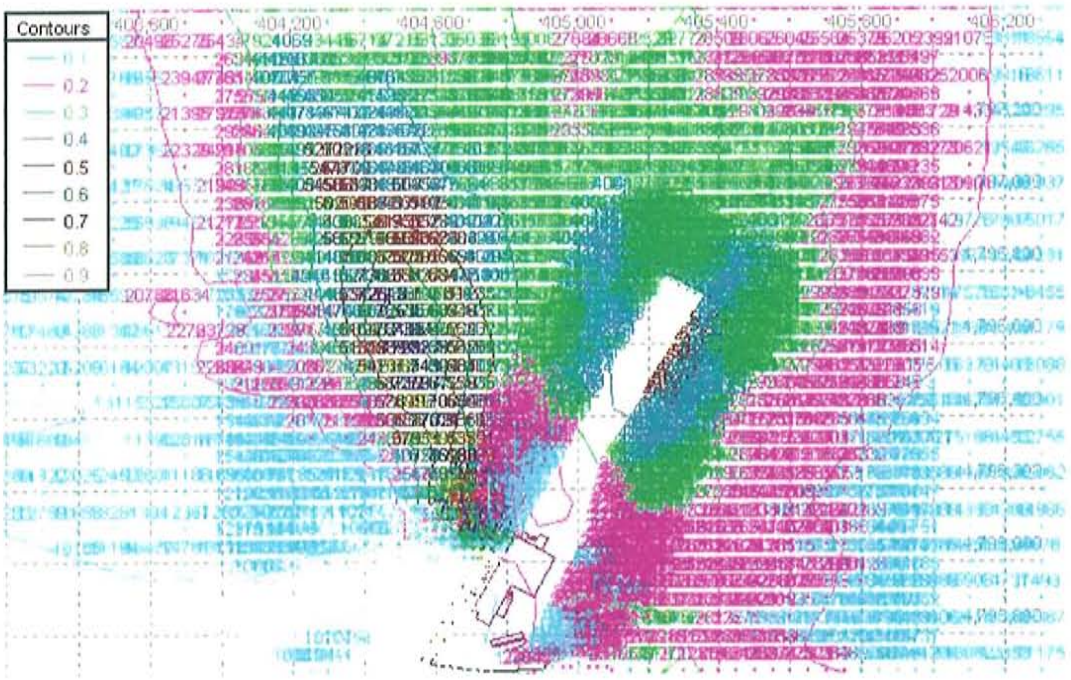


Figure 2 shows the same for the 24-hour averaging period, where the maximum predicted impact occurred on the property / ambient air boundary west of the boiler. All model receptors with predicted max impacts over 0.4 ug/m^3 are shown.

Figure 2 Maximum 24-hour Impact for 1 lb/hr Normalized Model TAP Source



The table at the end of this document shows the emissions resulting from the proposed action and estimates of maximum predicted impact for each TAP and its comparison with the respective IDAPA impact limit. The yellow highlights signify criteria pollutant emission levels lower than those currently permitted. Even with this very conservative analysis, only one of the TAPs had predicted impacts over half the IDAPA impact limit (arsenic at 76% of the IDAPA AACC of 2.3E-04 ug/m^3), and only one more had predicted impacts over 10% of the IDAPA impact limit (chromium VI at 41% of the IDAPA AACC of 2.3E-04 ug/m^3).

All model input files, and all files needed to duplicate this analysis or review the results are included in the Idaho Supreme 0906 AQ Modeling Files.zip file.

Pollutant	Emission Controls	Control Type	Emission Factor (EF)		EF Units	AP-42 Reference Table	Emissions (lb/hr)	Emissions (lb/yr)	Emissions (tons/yr)	IDAPA ELs	IDAPA ELs	Requires Modeling ?	Require Modeling ?	IDAPA AACC	IDAPA AAC	Model Pred Max Impact	Model Pred Max Impact
SO_2	N		35	S	lb/ton	1.1-3	94.5	827,498	413.7								
NO_x	N		12		lb/ton	1.1-3	64.8	567,428	283.7								
CO	N		0.5		lb/ton	1.1-3	2.7	23,643	11.8								
PM-10	Y	BH	0.02	A	lb/ton	1.1-6	1.0180	8,918	4.5								
VOCs	Y	FF	0.00918638		lb/ton	1.1-14	0.0496	434	0.2								
HCl	N		1.2		lb/ton	1.1-15	6.4775	56,743	28.4		0.05		yes		375		5.93
HF	N		0.15		lb/ton	1.1-15	0.8097	7,093	3.5								
POM	N		2.08		lb/10[12] Btu	1.1-17	0.0003	3	1.28E-03								
Sb	Y	FF	0.000018		lb/ton	1.1-18	0.0001	1	4.26E-04								
As	Y	FF	0.00041		lb/ton	1.1-18	0.0022	19	9.69E-03	1.56E-06		yes		2.30E-04		1.75E-04	
Be	Y	FF	0.000021		lb/ton	1.1-18	0.0001	1	4.96E-04	2.85E-05		yes		4.20E-03		8.94E-06	
Cd	Y	FF	0.000051		lb/ton	1.1-18	0.0003	2	1.21E-03	3.70E-06		yes		5.60E-04		2.17E-05	
Cr	Y	FF	0.00026		lb/ton	1.1-18	0.0014	12	6.15E-03		0.033		no				
Cr (VI)	Y	FF	0.000079		lb/ton	1.1-18	0.0004	4	1.87E-03	5.60E-07		yes		8.30E-05		3.36E-05	
Co	Y	FF	0.0001		lb/ton	1.1-18	0.0005	5	2.36E-03		0.0033		no				
Pb	Y	FF	0.00042		lb/ton	1.1-18	0.0023	20	9.93E-03		0.6 t/yr						
Mg	Y	FF	0.011		lb/ton	1.1-18	0.0594	520	2.60E-01		0.667		no				
Mn	Y	FF	0.00049		lb/ton	1.1-18	0.0026	23	1.16E-02		0.067		no				

Hg	Y	FF	0.000083		lb/ton	1.1-18	0.0004	4	1.96E-03		0.001		no			
Ni	Y	FF	0.00028		lb/ton	1.1-18	0.0015	13	6.62E-03	2.75E-05		yes		4.20E-03		1.19E-04
Se	Y	FF	0.0013		lb/ton	1.1-18	0.0070	61	3.07E-02							

Attachment C

Updated PTC Application Modeling Forms

Modeling Information- Point Source Stack Parameters **Form MI2**

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton Boise, ID 83706 For assistance: (208) 373-0502	PERMIT TO CONSTRUCT APPLICATION
Company Name:	Idaho Supreme Potatoes, Inc.	
Facility Name:	Firth Facility	
Facility ID No.:	011-00013	
Brief Project Description:	Tier II PTC application to modify boiler operations	

POINT SOURCE STACK PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	.7	8.	9.	10.
Emissions units	Stack ID	UTM Easting (m)	UTM Northing (m)	Base Elevation (m)	Stack Height (m)	Modeled Diameter (m)	Stack Exit Temperature (K)	Stack Exit Flowrate (acfm)	Stack Exit Velocity (m/s)	Stack orientation (e.g., horizontal, rain cap)
Point Source(s)										
Boiler #4	BB4	404804	4795919	1393	18.3	0.91	463.6	32000	23.22	V
Boiler #3	CB3	404797	4795908	1393	11.1	0.88	560.8	13000	10.09	V
Fluidized Bed Dryer	FBD	404751	4795927	1393	12.2	1.04	322.0	38600	21.45	V
National Dryer Stage A	DS_A	404805	4795931	1393	8.0	0.70	366.3	8500	10.42	V
National Dryer Stage B	DS_B	404813	4795943	1393	8.0	0.70	366.3	7500	9.20	V
National Dryer Stage C	DS_C	404817	4795949	1393	8.0	0.70	366.3	7500	9.20	V
Secondary Dryer (1st vent)	SD1	404834	4795961	1393	7.7	0.76	298.0	7000	7.28	V
Secondary Dryer (2st vent)	SD2	404836	4795959	1393	7.7	0.76	298.0	7000	7.28	V
Silo Storage A	SSA	404711	4795913	1392	22.4	0.24	298.0	750	7.58	V
Silo Storage B	SSB	404717	4795921	1392	22.4	0.24	298.0	750	7.58	V
Silo Storage C	SSC	404722	4795931	1393	22.4	0.24	298.0	750	7.58	V
Silo Storage D	SSD	404727	4795940	1393	22.4	0.24	298.0	750	7.58	V
Silo Storage E	SSE	404732	4795949	1393	22.4	0.24	298.0	750	7.58	V
Silo Storage F	SSF	404737	4795958	1393	22.4	0.24	298.0	750	7.58	V
Silo Storage G	SSG	404743	4795967	1393	22.4	0.24	298.0	750	7.58	V
Silo Storage H	SSH	404748	4795976	1393	22.4	0.24	298.0	750	7.58	V
Silo Storage I	SSI	404754	4795986	1393	22.4	0.24	298.0	750	7.58	V
Silo Storage J	SSJ	404759	4795995	1393	22.4	0.24	298.0	750	7.58	V

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton Boise, ID 83706 For assistance: (208) 373-0502	PERMIT TO CONSTRUCT APPLICATION
Company Name:	Idaho Supreme Potatoes, Inc.	
Facility Name:	Firth Facility	
Facility ID No.:	011-00013	
Brief Project Description:	Tier II PTC application to modify boiler operations	

POINT SOURCE STACK PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	.7	8.	9.	10.
Emissions units	Stack ID	UTM Easting (m)	UTM Northing (m)	Base Elevation (m)	Stack Height (m)	Modeled Diameter (m)	Stack Exit Temperature (K)	Stack Exit Flowrate (acfm)	Stack Exit Velocity (m/s)	Stack orientation (e.g., horizontal, rain cap)
Point Source(s)										
Flaker #1	FL1	404769	4795915	1393	17.1	1.14	293.0	7031	3.25	V
Flaker #2	FL2	404773	4795921	1393	17.1	1.14	293.0	7300	3.37	V
Flaker #3	FL3	404766	4795917	1393	17.1	1.14	293.0	7300	3.37	V
Flaker #4	FL4	404770	4795923	1393	17.1	1.14	293.0	7500	3.47	V
Flaker #5	FL5	404762	4795920	1393	17.1	0.63	293.0	7500	11.35	V
Flaker #6	FL6	404766	4795925	1393	17.1	0.76	293.0	7500	7.80	V
Flaker #7	FL7	404759	4795922	1393	17.1	0.76	293.0	7500	7.80	V
Flaker #8	FL8	404763	4795927	1393	17.1	0.76	293.0	8500	8.87	V
Flaker #9	FL9	404798	4795935	1393	17.1	0.61	293.0	7500	12.11	V
Flaker #10	FL10	404800	4795939	1393	17.1	0.61	293.0	7500	12.11	V
Flaker #11	FL11	404795	4795936	1393	17.1	0.61	293.0	7500	12.11	V
Flaker #12	FL12	404797	4795940	1393	17.1	0.61	293.0	7500	12.11	V

DEQ AIR QUALITY PROGRAM
1410 N. Hilton
Boise, ID 83706
For assistance: (208) 373-0502

PERMIT TO CONSTRUCT APPLICATION

Company Name:	Idaho Supreme Potatoes, Inc.
Facility Name:	Firth Facility
Facility ID No.:	011-00013
Brief Project Description:	Tier II PTC application to modify boiler operations

FUGITIVE SOURCE PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	Stack ID	UTM Easting (m)	UTM Northing (m)	Base Elevation (m)	Release Height (m)	Easterly Length (m)	Northerly Length (m)	Angle from North (°)	Initial Vertical Dimension (m)	Initial Horizontal Dimension (m)
Area Source(s)										
Volume Source(s)										
Space Heater S	SRC1	404746	4795870	1393	7.62				3.12	14.20
Space Heater N	SRC2	404882	4795957	1393	7.62				3.12	14.20
Space Heater E	SRC3	404844	4796025	1393	7.62				3.12	14.20
Space Heater W	SRC4	404805	4795970	1393	7.62				3.12	14.20

POINT SOURCES

Source ID	SO2 (lb/hr)	NO2 (lb/hr)	CO (lb/hr)	PM10 (lb/hr)		SO2 (g/sec)	NO2 (g/sec)	CO (g/sec)	PM10 (g/sec)
SSA				0.064					0.008
SSB				0.064					0.008
SSC				0.064					0.008
SSD				0.064					0.008
SSE				0.064					0.008
SSF				0.064					0.008
SSG				0.064					0.008
SSH				0.064					0.008
SSI				0.064					0.008
SSJ				0.064					0.008
DS_A	0.005	0.78	0.65	0.434		0.00063	0.09828	0.082	0.055
DS_B	0.002	0.31	0.26	0.399		2.52E-04	0.03906	0.033	0.050
DS_C	0.002	0.31	0.26	0.399		2.52E-04	0.03906	0.033	0.050
BB4	172.5	30.55	11.45	13.200		21.735	3.8493	1.443	1.663
CB3	0.03	6.08	3.59	0.320		0.00378	0.76608	0.452	0.040
FLKR1				0.375					0.047
FLKR2				0.375					0.047
FLKR3				0.375					0.047
FLKR4				0.375					0.047
FLKR5				0.375					0.047
FLKR6				0.375					0.047
FLKR7				0.375					0.047
FLKR8				0.375					0.047
FLKR9				0.375					0.047
FLKR10				0.375					0.047
FLKR11				0.375					0.047
FLKR12				0.375					0.047
SD1	0.0002	0.03	0.02	0.377		2.52E-05	0.00378	0.003	0.048
SD2	0.0002	0.03	0.02	0.377		2.52E-05	0.00378	0.003	0.048
FBD	0.004	1.1	0.57	3.500		0.0005	0.1386	0.072	0.441

Volume Sources

Source ID	SO2 (lb/hr)	NO2 (lb/hr)	CO (lb/hr)	PM10 (lb/hr)		SO2 (g/sec)	NO2 (g/sec)	CO (g/sec)	PM10 (g/sec)
SRC1		0.8	0.67	0.06			0.1008	0.0844	0.0077
SRC2		1.5	1.3	0.11			0.1890	0.1638	0.0144
SRC3		0.8	0.67	0.06			0.1008	0.0844	0.0077
SRC4		0.2	0.17	0.02			0.0252	0.0214	0.0025

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 NORTH HILTON, BOISE, ID 83706 · (208) 373-0502

C. L. "BUTCH" OTTER, GOVERNOR
TONI HARDESTY, DIRECTOR

November 23, 2007

VIA EMAIL

Wade Chapman, General Manager
Idaho Supreme Potatoes, Inc.
P.O. Box 246
Firth, Idaho 83236

RE: Facility ID No. 011-00013, Idaho Supreme Potatoes, Inc., Firth, Idaho
Completeness Determination of PTC Application, Boiler #4 Fuel and APCD Changes

Dear Mr. Chapman:

On April 3, 2007, the Department of Environmental Quality (DEQ) received your Permit to Construct application to modify the Tier II operating permit for the Idaho Supreme Potatoes, Inc. (ISP) potato dehydration plant located at the corner of Highway 91 and 800 N. Goshen Highway near Firth. This project for Boiler #4 includes adding coal as an authorized fuel, reducing the allowable fuel oil sulfur content from 1.75% to 1.69%, and installing an air pollution control device (a baghouse). On May 3, 2007, the application was determined to be incomplete. On October 25, 2007, DEQ received your response to the incompleteness issues. The application materials have been reviewed, and the application determined to be complete. Therefore, DEQ will proceed with the processing of this permit application in accordance with IDAPA 58.01.01.200 (Rules for the Control of Air Pollution in Idaho)(Rules).

Although the application has been declared administratively complete, it may be necessary to solicit further information to assist us during our review. The permit evaluation phase may take up to 60 days, although the application will be processed as expeditiously as our resources allow. Additionally, an opportunity for a public comment period will be provided in accordance with IDAPA 58.01.01.209.01.c. (Rules). Should a comment period be required, at least 45 days will be added to the time needed to process your application.

If you have any questions about this letter or about the air quality permitting process, please contact me at (208) 373-0502 or cheryl.robinson@deq.idaho.gov.

Sincerely,

Cheryl A. Robinson

Cheryl A. Robinson, P.E.
Permit Writer
Air Quality Division

CR/ssaa Project No. 2007.0049

en: Rensay Owen, Aaron Swift, Ed Jolley, Idaho Falls Regional Office
Bill Rogers, Permit Coordinator
Marilyn Seymore, AQ Division QA
Helen Price, Stationary Source Administrative Assistant
Steve Bacom, AQ Compliance & Enforcement Coordinator
Mike Stambulis, Technical Services

ec: Wade Chapman, wade@idahosupreme.com
Steven Boodry, sboodry@idahosupreme.com
Dan Heiser, JBR Environmental Consultants, Inc., dheiser@jbrenv.com

c: Reading File
Source File